Topic 2.2

Bonds and Energy

Use with textbook pages 123-124.

- 1. a) What type of compound are lithium fluoride and sodium oxide? Explain your answer.
 - **b)** What type of bond is formed between the atoms of this type of compound? Describe how it forms and how it affects stability.
 - c) Fill in the following table using Bohr diagrams to show how a lithium atom combines with a fluorine atom to form lithium fluoride. What is happening to the atoms and bonds in this reaction? Describe how energy is involved.

lithium atom + fluorine atom lithium fluoride

d) Fill in the following table using Bohr diagrams to show how sodium oxide is broken apart into a sodium atom and two oxygen atoms. What is happening to the atoms and bonds in this reaction? Describe how energy is involved.

sodium oxide sodium atoms + oxygen atom